AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q79997

Application No.: 10/781,911

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): An arc welder having: a rectifier circuit which rectifies an

alternating current to a direct current; an inverter circuit which converts an output of said

rectifier circuit to a high-frequency alternating current; a transformer which converts an output of

said inverter circuit to a voltage suitable for arc welding; a second rectifier circuit which rectifies

an output of said transformer to a direct current; and a first DC reactor which is connected to said

second rectifier circuit, wherein

said arc welder comprises a current circuit which is connected in parallel to said second

rectifier circuit with a reactance that is larger than a reactance of said first DC reactor,

wherein-a voltage that is applied to the current circuit from the transformer is higher than

a voltage that is applied to the second rectifier circuit from the transformer, and

an output voltage of the current circuit is always higher than an output voltage of the

second rectifier circuit, and

said current circuit comprises:

a current controlling circuit which controls a current that is outputted from said

transformer,

a third rectifier circuit which rectifies said controlled current, and

a second DC reactor which is connected to said third rectifier circuit.

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2. (currently amended): The arc welder according to claim 1, wherein said reactance of said first  $\underline{DC}$  reactor is 20  $\mu H$  (microhenries) or smaller, and said reactance of said current circuit

which is connected in parallel to said second rectifier circuit is 100  $\mu H$  or larger.

3. (canceled).

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